



# CORPORATE GOVERNANCE AND FIRM PERFORMANCE: AN EMPIRICAL ANALYSIS WITH DUMMY VARIABLES

Dr. Pallavi (Joshi) Kapooria

Faculty (Department of MBA), Sri Atal Bihari Vajpayee Govt. Arts & College, Indore.

## ABSTRACT

Corporate governance is fundamental to the economies with extensive business background and also facilitates the success for economic growth. Corporate governance provides an assurance that management is acting in the best interest of the corporation, thereby contributing to business prosperity through openness in disclosures and accountability. In the context of the changing corporate environment, an analysis of these practices and the association of their adoption and effects on firm performances can form a basis of economic reforms. This empirical paper aims at exploring the impact of adoption of corporate governance as recommended by SEBI on selected Indian firms. The results reveal that among the selected corporate governance norms, presence of a key executive director in an audit committee is of vital significance in affecting overall performance of organizations. The presence of an active group of executive directors in the key committees contributes a great deal towards ensuring confidence in the market.

**KEYWORDS:** Corporate Governance, Listing Agreement, Audit Committee, Executive Director.

## 1. INTRODUCTION

Corporate governance has attained significance all over the world. Though corporate governance has been a popular concept in the developed countries, globalization and liberalization has made the topic gain rapid popularity in India and other developing countries of late. Opening up of the Indian economy has thrown open many opportunities and challenges for the domestic firms. They have to confront extensive competition both from domestic and multinational corporates and corporate governance has become a critical factor for them to gain competitive advantage, thereby ensuring their survival. Though concrete evidence does not substantiate the relationship between good corporate governance and creation of value for an organization, there is strong evidence in the past to affirm the destruction of good values by bad corporate governance. Factors such as integration and globalization have lead to rapid developments in the field of financial markets and a surge of corporate scandals such as Enron, World Com and others strongly suggest that weak corporate governance is a red signal which has to be carefully monitored by all stakeholders of corporates as well as the government regulatory bodies.

Corporate governance is a broad term which describes the processes, customs, policies, laws and institutions that directs the organizations and corporations in the way they act, administer and control their operations. It works to achieve the goal of the organization and manages the relationship among the stakeholders including the board of directors and the shareholders. Fine corporate governance is an essential standard for establishing the striking investment environment which is needed by competitive companies to gain strong position in efficient financial markets.

Corporate Governance caught the attention of researchers during 1998 with the Confederation of Indian Industry publishing the desirable voluntary code. SEBI made headway in the field of Corporate Governance by formulating the first ever formal regulatory framework for listed companies on corporate governance on February 2000 under Clause 49 of the Listing Agreements. These regulations were framed based on the suggestions of Kumar Mangalam Birla Committee Report, 1999. These regulations were amended on October 2004 based on the proposals of Narayana Murthy Committee Report, 2003. Thereafter, the Ministry of Corporate Affairs formulated guidelines on corporate governance for voluntary adoption by the corporate sector on December 2009. The latest revised Companies Act of 2013 has got provisions relating to Corporate Social Responsibility to be adhered to by corporates.

## 2. REVIEW OF LITERATURE

The term corporate governance became a prominent research theme after the publication of Cadbury committee report in the UK in the early 1990s. Various studies have analyzed and highlighted a range of aspects of corporate governance norms as recommended by SEBI and tried to establish a linkage between the norms and the efficiency of the firms.

Bharadwaj N and Rao B (2014) have found that majority of companies studied are merely complying to mandatory requirements and disclose information required by the revised clause 49 while few companies such as Bajaj auto, Infosys, Dr. Reddy, etc. are disclosing information beyond the mandatory levels as required by clause 49. Kaur J (2014) has found that various committees constituted under the corporate governance mechanism plays a vital role in enhancing

the performance and competitiveness of banking companies and acts as a clear path for achieving business excellence. Raja A and shah H (2014) found that the two variables of duality and presence of stock holders significantly impact financial performance while all other variables of corporate governance exert insignificant impact on financial performance. Jia Hua Tsai et al. (2013) pointed out that intellectual capital is significantly linked with stock return characteristics and professional manager control of firms. Resource and development intensity, Advertising intensity and Human resource capital intensity are significantly related to Tobin's Q. Aggarwal P(2013) established that corporate governance rating exerts positive impact on financial performance of firms. The study revealed that good governance fosters better financial performance and that ratings of company along with employees related and environmental dimensions also significantly influence corporate financial performance. An empirical analysis of Indian companies revealed that among the various corporate governance norms under the scope of the study, a key executive director in audit committee has a major role in effective corporate performance. (Kapooria P, Sharma R C and Kaul D 2013). Annie and Kaczmarek (2012) conducted a research which points to the importance of a careful selection process of directors by nomination committees. It underlines the role for active and optimum leadership on boards. A study by Renders and Gaeremynck (2012) examines the impact of principal-principal agency problems on the quality and effectiveness of corporate governance structures. Using a simultaneous equations model, they found that the conflict index affects the quality and effectiveness of corporate governance. In a review by Khan H (2011), which is a collection of volume of research on corporate governance the significance of effective corporate governance is being evident. Lishenga L (2011) found that outside dominated boards are significantly more likely to respond to poor performance by dismissing the CEO. He also finds evidence suggesting that outside directors' act in the shareholders' interest in their decision in the adoption of poison pill provision. Mollah et al. (2007) empirically examined the relationship between ownership structure, corporate governance attributes and firm performance. A sample of 55 companies, listed on Dhaka Stock Exchange in Bangladesh had been taken for the period of 2002-04. In order to assess the governance practices of the firms, a questionnaire was developed covering the main dimensions such as general information, board meetings, audit and executive committee and CEO of the firms. The data with respect to performance and ownership structure had been collected from the secondary sources of Dhaka Stock exchange for the same period. Two- stage ordinary least square regression (2OLS) model was run for data analysis. ROA, ROE and market capitalization were used as firm performance variables. Dhanwan (2006) identified the role of board of directors in corporate governance in large listed firms of India. The primary data had been collected through a questionnaire from 89 companies listed on Bombay Stock Exchange and Delhi Stock Exchange. It was concluded that increase in turnover influenced the board size only up to a certain level. Prasanna (2005) in her study of 130 Indian companies, focused on relationship between independent directors and financial performance. The study covered a period of three years from 2002 to 2004. Composition of independent directors, participation in board meetings, annual general meetings, audit committee meetings and chairmanship of governance committee were taken as independent variables. However, value creation as measured by market value to book value ratio had been taken as a dependent variable.

A perusal of the above review of literature reveals that a handful of empirical studies have been conducted related to corporate governance and firm performance.

Moreover, a few researchers have focused on the Indian clause 49 of the listing agreement; both mandatory and non-mandatory recommendations.

### 3. OBJECTIVE

This paper aims at exploring the impact of adoption of the few norms of Clause 49 of Listing Agreement pertaining to corporate governance clause as recommended by SEBI, by the selected Indian corporate. Selected norms as stated in the following hypotheses have been considered for the purpose of analysis.

### 4. HYPOTHESES

$H_{11}$  : An optimum representation of Non-Executive Directors on the Board will lead to better performance of the firms. (BOD)

$H_{12}$  : Representation of a Key Executive Director in an Audit Committee will be associated with higher corporate performance. (KED)

$H_{13}$  : Firms having established a Remuneration Committee should reflect higher performance than those who do not have such committees. (RC)

### 5. SAMPLE SELECTION

For the purpose of the present analysis, 50 companies, listed on the NSE, were selected, from across the various sectors, on a random basis. A Panel study was aimed by obtaining the financial data of those 50 companies selected over a period of two financial years (2 FY) ie 2013-2014 and 2014-2015, providing a total of 100 observations. The methodology was based on secondary data, as extracted from the financial reports of the selected companies.

#### 5.1 Independent Variables:

The independent variables (X) were captured from Clause 49 of Listing Agreement of SEBI pertaining to corporate governance. Since these variables as mentioned above are not quantifiable i.e, only their absence or presence can be observed, Dummy Variable Approach has been applied for further analysis. For the purpose of the study, the presence of each these variables is denoted by 1 & their absence by 0.

#### 5.2 Dependent Variable (PERF):

As the objective of the study is to establish a linkage between the selected corporate governance attributes and corporate performance, net profit margin on sales, return on assets and return on equity have been used as indicators of financial performance of the companies over a period of two financial years and was used as the dependent variable (Y).

### 6. EMPIRICAL MODEL

$$Y_{it} = \alpha_0 + \alpha_1 D_{2it} + U_{it} \quad \text{Eq (1)}$$

Where,

$Y_{it}$  = Performance of  $i^{\text{th}}$  firm in the  $t^{\text{th}}$  year

$i$  = no. of firms 1 to 30

$t$  = no. of year 1 and 2

$\alpha_0$  = Intercept

$\alpha_1$  to  $\alpha_4$  = Coefficients of Dummy variables

$D_{2it}$  to  $D_{4it}$  = Dummy Variables

$U_{it}$  = Stochastic Error

Dummy variables are defined as follows:		
$D_{2it}$	= 1	if there is an Optimum representation of Non-Executive Directors & =0, if otherwise (BOD)
$D_{3it}$	= 1	if there is a Key Executive Director in Audit Committee & = 0, if otherwise (KED)
$D_{4it}$	= 1	if Remuneration Committee is present & =0, if otherwise (RCOM)

Equation (1) has three sets that include individually four dummy variables as defined above and the comparison of the mean performance is analyzed as follows:

Mean Performance with the Optimum Representation of Non-Executive Directors (BOD) is

$$E(Y_{it}|D_{2it}=1) = \alpha_0 + \alpha_1$$

Mean Performance without Optimum Representation of Non-Executive Directors is

$$E(Y_{it}|D_{2it}=0) = \alpha_0$$

The difference is of  $\alpha_1$ . There is a hypothesis such that  $\alpha_1 \neq 0$  and positive.

$$H_{11} : \alpha_1 \neq 0 \text{ and } +ve$$

If  $\alpha_1$  is +ve and significant (determined through applying t-test), the hypothesis is accepted and there will be difference between mean performance of the presence of optimum representation of non-executive directors and its absence. If  $\alpha_1$  is positive but not significant, the hypothesis is rejected and it may be considered that there will be no difference between mean performances of the two types.

Similarly, estimation of mean performance of each attribute can be analyzed and conclusions can be derived accordingly.

$$E(Y_{it}|D_{3it}=1) = \alpha_0 + \alpha_3 \\ = \alpha_1$$

$$H_{12} : \alpha_3 \neq 0 \text{ and positive}$$

$$E(Y_{it}|D_{3it}=0) = \alpha_0 + \alpha_4 \\ = \alpha_1$$

$$H_{13} : \alpha_4 \neq 0 \text{ and positive}$$

### 7. EMPIRICAL ANALYSIS

#### 7.1 Optimum Composition of Board of Directors (BOD)

$D_{2it}=1$ , if there is an optimum composition and =0, if otherwise.

	Unstandardized Coefficients		t	Significance level
	$\alpha$	Std. Error		
(Constant)	24.937	17.316	1.44	0.153
BOD	18.395	17.86	1.03	0.306

Dependent Variable: PERF

Substituting the values in Eq(1),

$$Y_{it} = 24.937 + 18.395 D_{2it}$$

SE (17.860)

t (1.030)

sig (0.306)

Mean performance with the presence of BOD

$$E(Y_{it}|D_{2it}=1) = 24.937 + 18.395 \\ = 43.332$$

Mean performance with the absence of BOD

$$E(Y_{it}|D_{2it}=0) = 24.937$$

The hypothesis that 'the optimum representation of board will lead to better performance' is rejected. The value of  $\alpha_1$  is +ve. It implies that mean performance with the optimum board composition is higher than the mean performance with its absence. However, the value of  $\alpha_1$  is not statistically significant, therefore, it may be concluded at 5% level of significance, that the difference between the mean performance due to absence/presence of optimum representation is not statistically significant.

#### 7.2. Presence of Key Executive Director in Audit Committee (KED)

	Unstandardized Coefficients		t	Significance Level
	$\alpha$	Std. Error		
(Constant)	38.098	4.249	8.967	.000
KED	45.885	14.162	3.240	.002

Dependent Variable: PERF

$$Y_{it} = 38.098 + 45.885 D_{3it}$$

SE (14.162)

t (3.240)

sig (0.002)

Mean performance with the presence of KED

$$E(Y_{it}|D_{3it}=1) = 38.098 + 45.885 \\ = 83.983$$

Mean performance with the absence of KED

$$E(Y_{it}|D_{3it}=0) = 38.098$$

The hypothesis that 'the presence of a key executive director in audit committee will lead to higher performance' is accepted. The value of  $\alpha_2$  is +ve. It implies that mean performance with the presence of key executive director is higher than the mean performance with its absence. Moreover, the value of  $\alpha_2$  is statistically significant, therefore, it may be concluded at 5% level of significance, that the difference between the mean performance due to absence/ presence of optimum representation is statistically significant.

### 7.3. Presence of Remuneration Committee (RCOM)

	Unstandardized Coefficients		t	Significance Level
	$\alpha$	Std. Error		
(Constant)	48.373	7.623	6.346	.000
RCOM	-8.906	9.177	-.970	.334

Dependent Variable: PERF

$$Y_{it} = 48.373 + (-8.906) D_{4it}$$

SE (9.177)

t (-0.907)

sig (0.334)

Mean performance with the presence of RCOM

$$E(Y_{it}|D_{4it}=1) = 48.373 + (-8.906) \\ = 39.467$$

Mean performance with the absence of RCOM

$$E(Y_{it}|D_{4it}=0) = 48.373$$

The hypothesis that 'the presence of a remuneration committee will lead to better performance' is rejected. The value of  $\alpha_2$  is -ve. It implies that mean performance with absence of a remuneration committee is higher than the mean performance with its presence. However, the value of  $\alpha_2$  is not statistically significant, therefore, it may be concluded at 5% level of significance, that the difference between the mean performance due to absence/ presence of remuneration committee is not statistically significant.

## 8. CONCLUSION

The present empirical analysis may conclude that an Executive Director of an organization has a strong hold on the functioning of any organization and has a greater concern for the goodwill of the organization and hence will be in a better position to initiate financial decisions in the interest of an organization. Hence, it may be conclude that out of the norms selected for the purpose of the study, Presence of a Key Executive Director in the Audit Committee (KED) plays a vital role in influencing the performance of an organization. A firm with an Audit Committee consisting of only independent directors who hardly meet twice a year may not have a strong hold on the corporate affairs and may thus increase the possibility that the firm will be associated with misleading and fraudulent reporting. Thus, presence of a Key Executive Director is instrumental in shaping firms' performance and will strengthen the functioning and decision-making of an organization. This contributes positively to the quality of the financial reporting process and risk management practices and consequently enhances market value. They tend to have a better understanding of risk appetite of firms and that shareholders value, solid risk practices and reward firms with enhanced market value and hence an improved performance.

## REFERENCES

1. Aggarwal, P. 2013. Impact of Corporate Governance on Corporate Financial Performance. Journal of Business and Management, 13(3) : 01-05.
2. Annie, P. & Kaczmarek, S. 2012. Board Task-related Faultlines and Firm Performance: A Decade of Evidence. Corporate Governance : An International Review, 20(4) : 337-351
3. Bharadwaj, N. & Rao, B. 2014 Corporate Governance Practices in India - A Case Study, Asian Specific Journal of Research. 1(13) : 43- 54.
4. Cadbury, A. 1992. The Financial Aspects of Corporate Governance - A Report of the Committee on Corporate Governance. Gee and Co, London.
5. Dhawan J., (2006). Board of directors and corporate governance in large listed firms in India. IUP Journal of Corporate Governance. 5 (3): 39-61.
6. Jeffrey, C. 2011. Corporate Governance and Audit : An Empirical Study. International Journal of Governance. 1(2).
7. Jia-Hua, T. et al. 2013. Intellectual Capital, Corporate Governance and Firm Performance. Information Management and Business Review, 5,(10) : 482-491.
8. Kapooria, P. Sharma, R.C. & Kaul, D. et al. 2013. Some Challenges of Corporate Governance on Performance: An Innovative Econometric Analysis for Sustainability of Firms, Corporate Governance in Emerging Markets. 13 : 176 – 185 .Bloomsbury Publishers, New Delhi.
9. Kapooria, P. Sharma, R.C. & Kaul, D. 2013. Impact of Corporate Governance on Firm Performance: An Empirical Analysis of IT and Manufacturing Sector. Global Research Analysis. 2(6) : 123-124.
10. Kaur, J. 2014. Corporate Governance and Financial Performance: A case study of Indian Banking Industry. Asian Journal of Multidisciplinary Studies, 2(2): 91-96.
11. Khan, H. 2011. A Literature Review of Corporate Governance. International Conference on E-business. Management and Economics IPEDR , 25. IACSIT Press. Singapore.
12. Lishenga, L. 2011. Corporate Governance reaction to declining firm performance: Evidence from NSE. IJG.
13. Mishra, A. & Bhattacharya, S. 2011. The Linkage Between Financial Crisis and Corporate Governance: A Literature Review. Journal of Governance, 1(3).
14. OECD (2004), Principles of Corporate Governance, [www.oecd.org/dataoecd/32/18/31557724.pdf](http://www.oecd.org/dataoecd/32/18/31557724.pdf).